

ABSTRACT OF THE DISCLOSURE

A technique for optimally balancing the load between a series of coprocessors that takes into consideration the load associated with each coprocessor. A cost associated with a packet is determined. This cost along with the coprocessor's current load is used to determine an anticipated load. The anticipated load is used to select a coprocessor that is to process the packet. In one embodiment, the coprocessor with the minimal anticipated load is selected. In another embodiment, an output port associated with the packet is checked to determine if it is congested. If so, a coprocessor other than the coprocessor with the minimum load is selected.